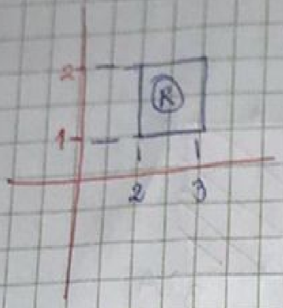
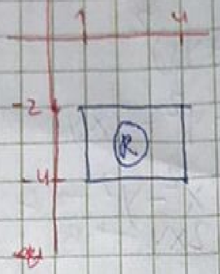
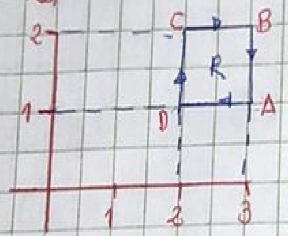


transformar

$f(z) = z^2$



$f(z) = z^2$



B-A $\quad W = (x+yi)^2 \quad u = x^2 - y^2 \quad v = 2xy$

$W = x^2 + 2xyi - y^2$

A(3,1) B(3,2) $\quad x = 3 \quad u = 9 - y^2 \quad v = 6y$

A'(8,6) B'(5,12) $\quad u = 9 - \frac{v^2}{36}$ //

A-D $\quad$ A'(8,6) $\quad$ D(2,1) $\quad u = x^2 - 1 \quad v = 2x$

A(3,1) $\quad$ D'(3,4)

$u = \frac{v^2}{4} - 1$ //

$y = 1$

D-C $\quad$ D(2,1) $\quad$ C(2,2) $\quad u = 4 - y^2 \quad v = 4y$

D'(3,4) $\quad$ C'(0,8)

$u = 4 - \frac{v^2}{16}$ //

$x = 2$

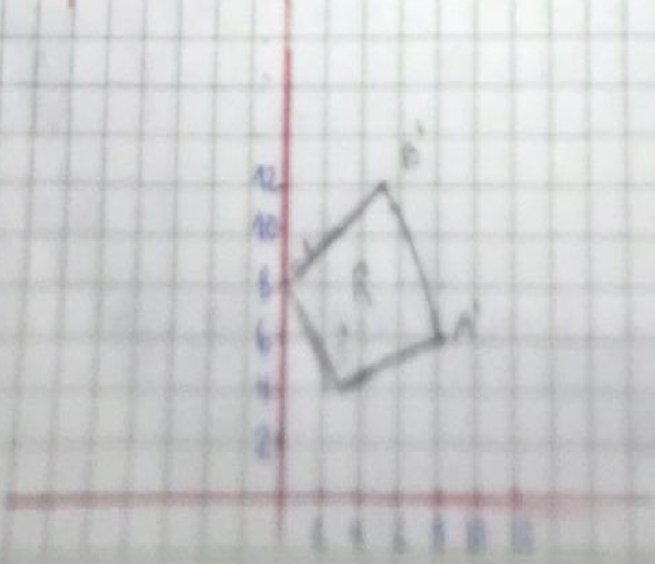
C-B

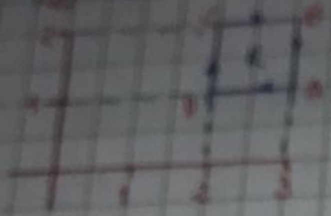
C(2,2) $\quad$ B(3,2) $\quad u = x^2 - 4 \quad v = 4x$

C'(0,8) $\quad$ B'(5,12)

$u = \frac{v^2}{16} - 4$ //

$y = 2$





B-A $w = (x+yi)^2$ $u = x^2 - y^2$ $v = 2xy$

$w = x^2 + 2xyi - y^2$

A(3,1) B(3,2) $x = 3$ $u = 9 - y^2$ $v = 6y$

A'(8,6) B'(5,12) $u = 9 - \frac{v^2}{36}$

A-D A'(8,6) D(2,1) $u = x^2 - 1$ $v = 2x$

A(3,1) D'(3,4)

$u = \frac{v^2}{4} - 1$

$y = 1$

D-C D(2,1) C(2,2) $u = 4 - y^2$ $v = 4y$

D'(3,4) C'(0,8)

$u = 4 - \frac{v^2}{16}$

$x = 2$

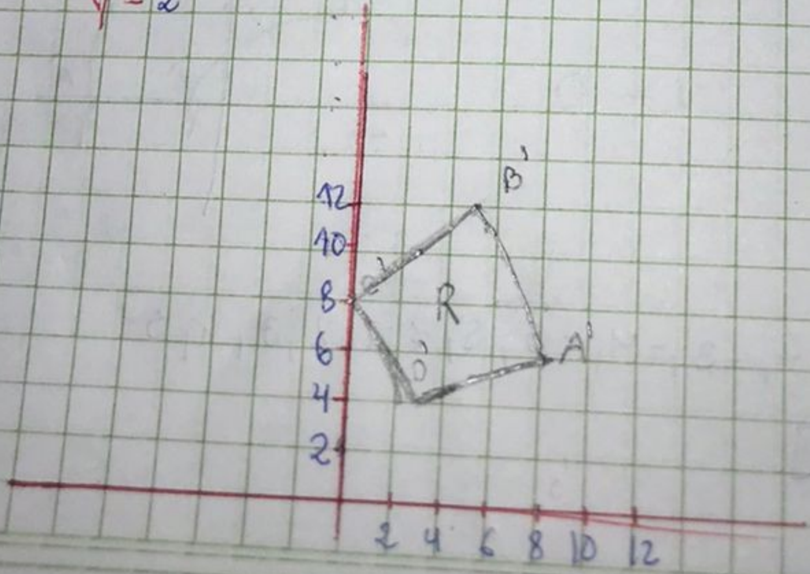
C-B

C(2,2) B(3,2) $u = x^2 - 4$ $v = 4x$

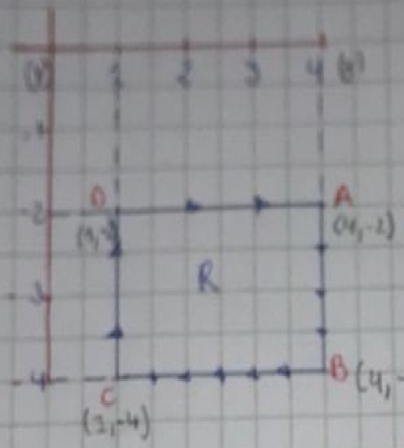
C'(0,8) B'(5,12)

$u = \frac{v^2}{16} - 4$

$y = 2$



Nota:



$f(z) = z^2$ $\quad w = (x+yi)^2$

$u = x^2 - y^2$ $\quad v = 2xy$

A - B

A (4, -2) $\quad$ B' (0, -32)

A' (12, -16) $\quad$ B (4, -4)

$x = 4$

$u = 16 - \frac{v^2}{64}$ // $\quad v = 8y$

B - C

B (4, -4) $\quad$ C' (-15, -8)

B' (0, -32) $\quad$ C (1, -4)

$y = -4$ $\quad u = \frac{v^2}{64} - 16$ //

$v = -8x$

C - D

C (1, -4) $\quad$ D (1, -2)

C' (-15, -8) $\quad$ D' (-3, -4)

$x = 1$ $\quad u = 1 - \frac{v^2}{4}$ //

$v = 2y$

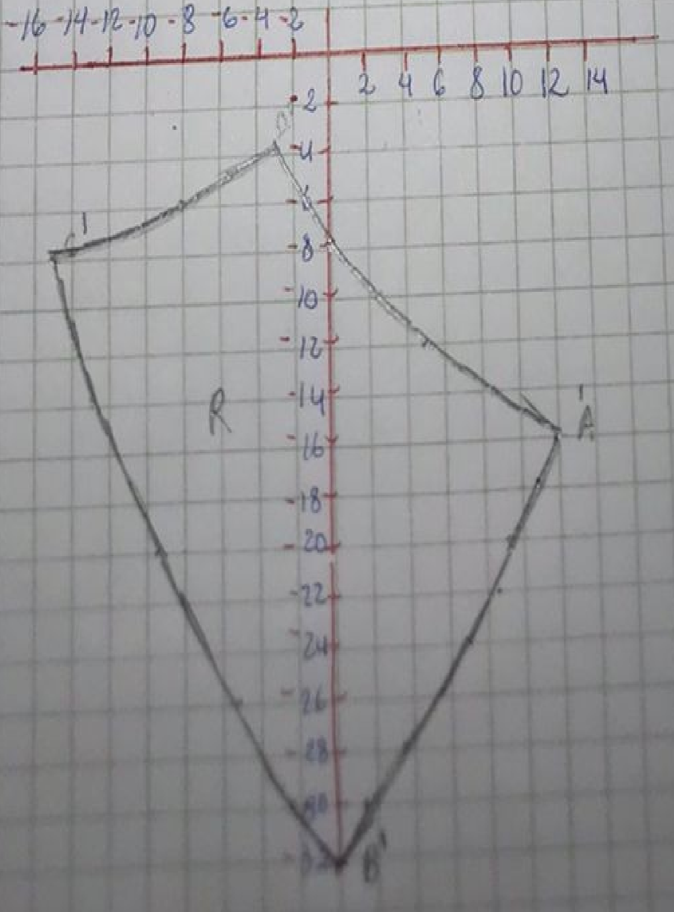
D - A

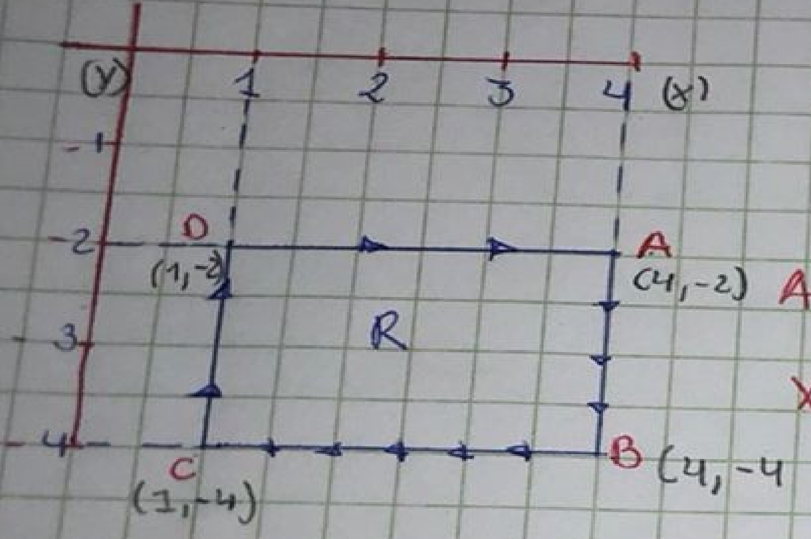
D (1, -2) $\quad$ A (4, -2)

D' (-3, -4) $\quad$ A' (12, -16)

$y = -2$ $\quad u = \frac{v^2}{16} - 4$ //

$v = -4x$





$f(z) = z^2$ $w = (x + yi)^2$

$u = x^2 - y^2$ $v = 2xy$

A - B A (4 , -2) B' (0 , -32)
A' (12 , -16) B (4 , -4)

$x = 4$

$u = 16 - \frac{v^2}{64}$ // $v = 8y$

B - C B (4 , -4) C' (-15 , -8) $y = -4$ $u = \frac{v^2}{64} - 16$ //
B' (0 , -32) C (1 , -4)

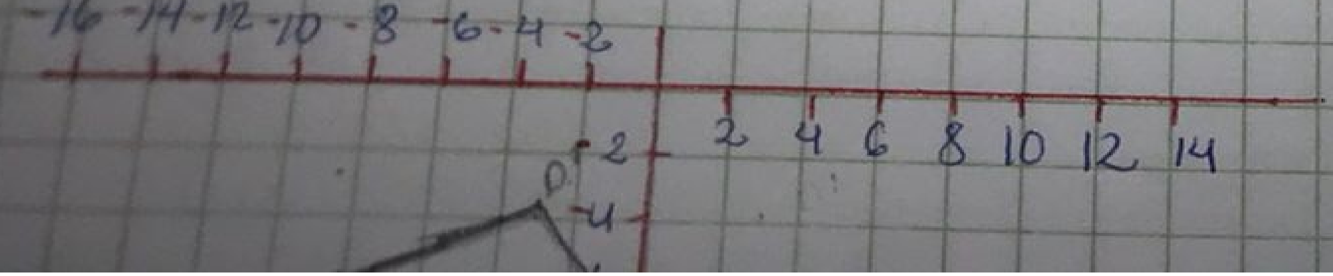
$v = -8x$

C - D C (1 , -4) D (1 , -2) $x = 1$ $u = 1 - \frac{v^2}{4}$ //
C' (-15 , -8) D' (-3 , -4)

$v = 2y$

D - A D (1 , -2) A (4 , -2) $y = -2$ $u = \frac{v^2}{16} - 4$ //
D' (-3 , -4) A' (12 , -16)

$v = -4x$

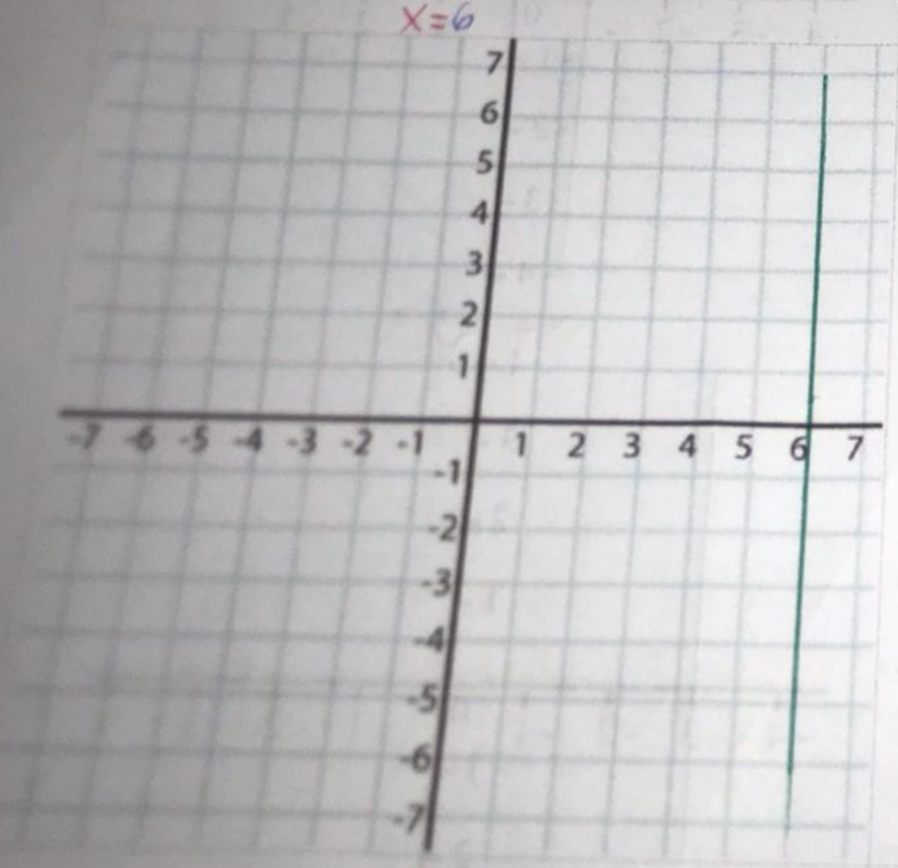


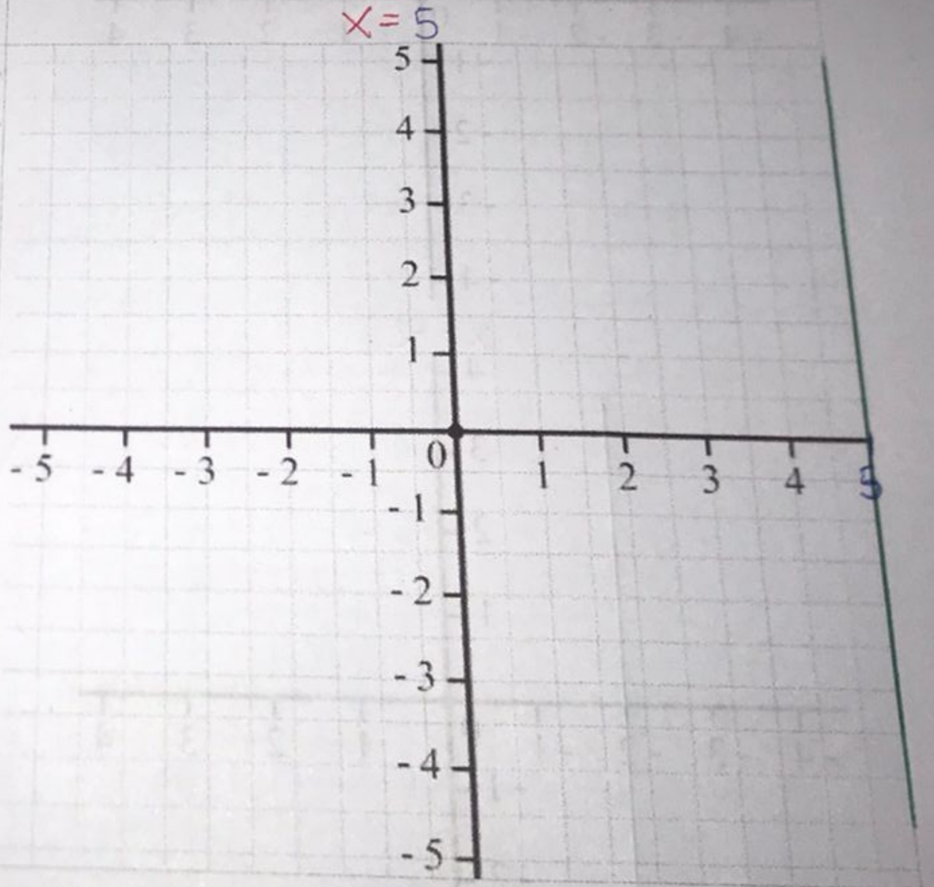
...upe Alejo Garcia		Variable compleja	EMI ESCUELA MILITAR DE INGENIERIA "Mcal. Antonio José de Sucre" Prestigio, Disciplina y Mejores Oportunidades
Semestre: 3er	Código: S9077-8		
Carrera: Sistemas	12/ 06/ 2023		

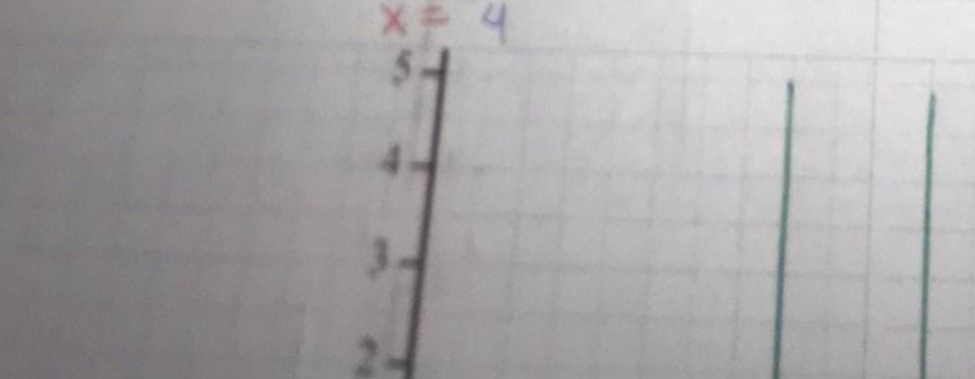
Trabajo Practico

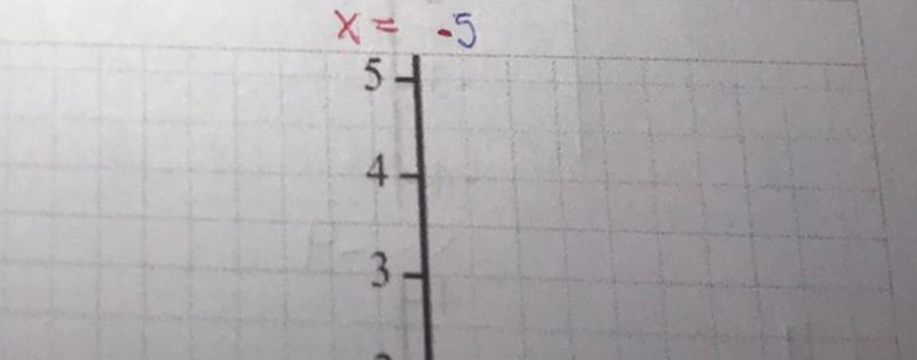
Grafico

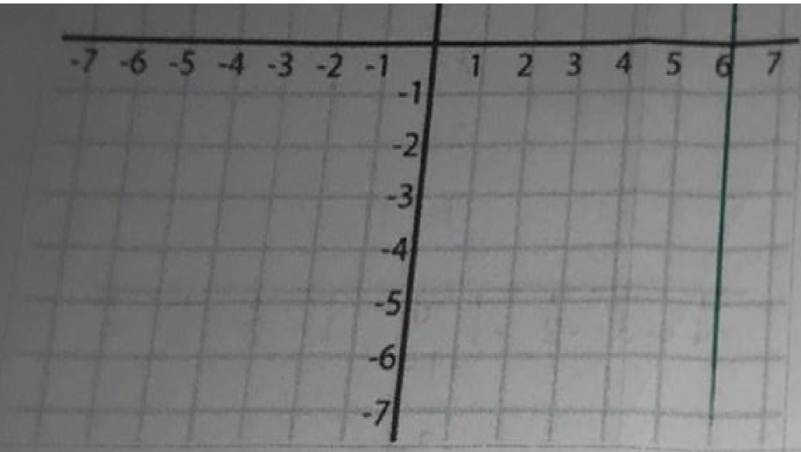
Graficar las siguientes funciones:

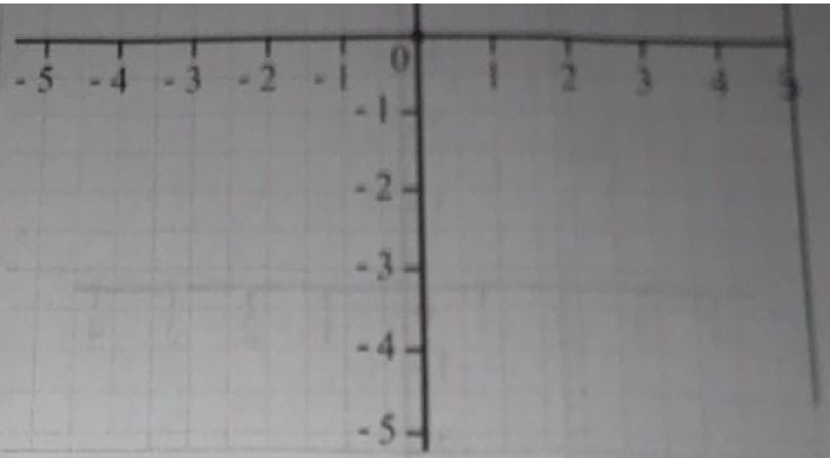




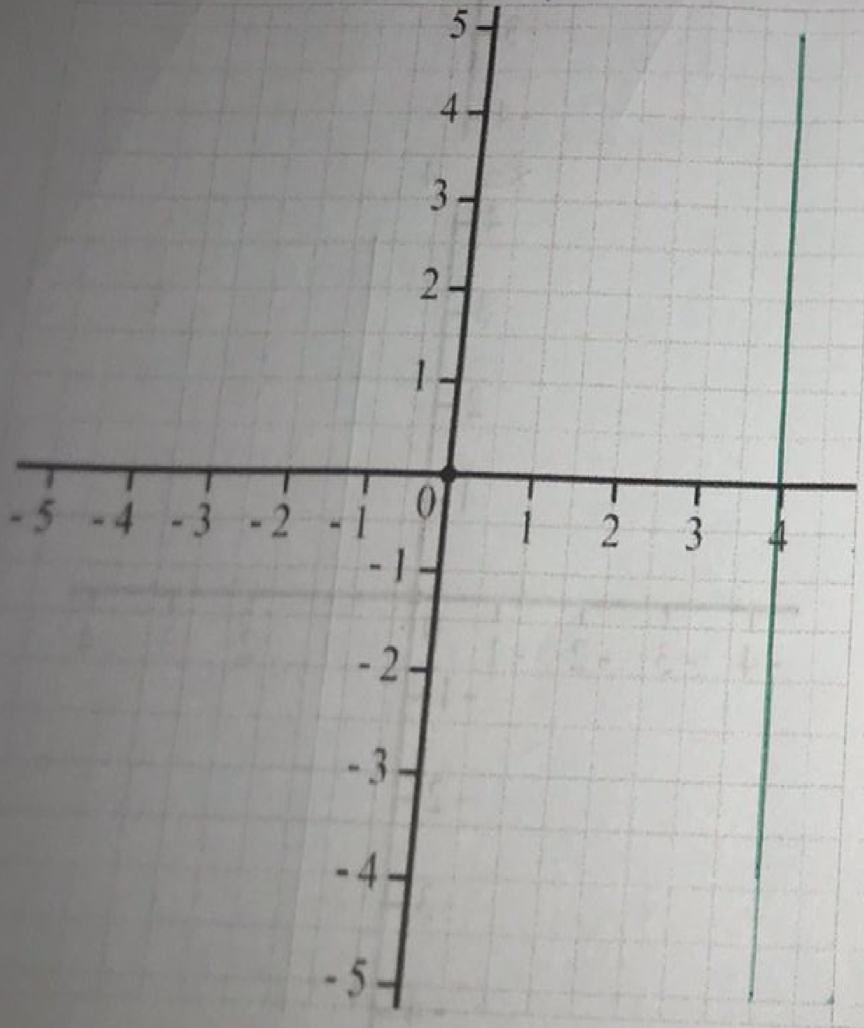




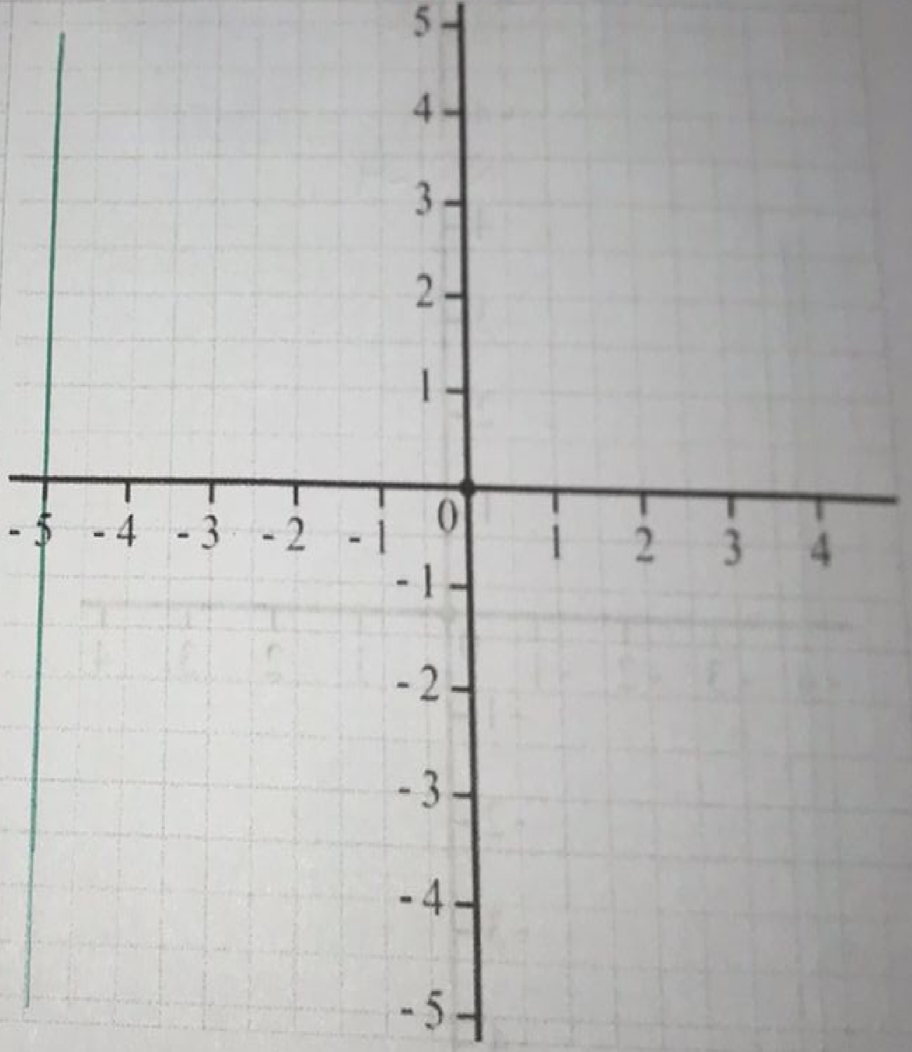




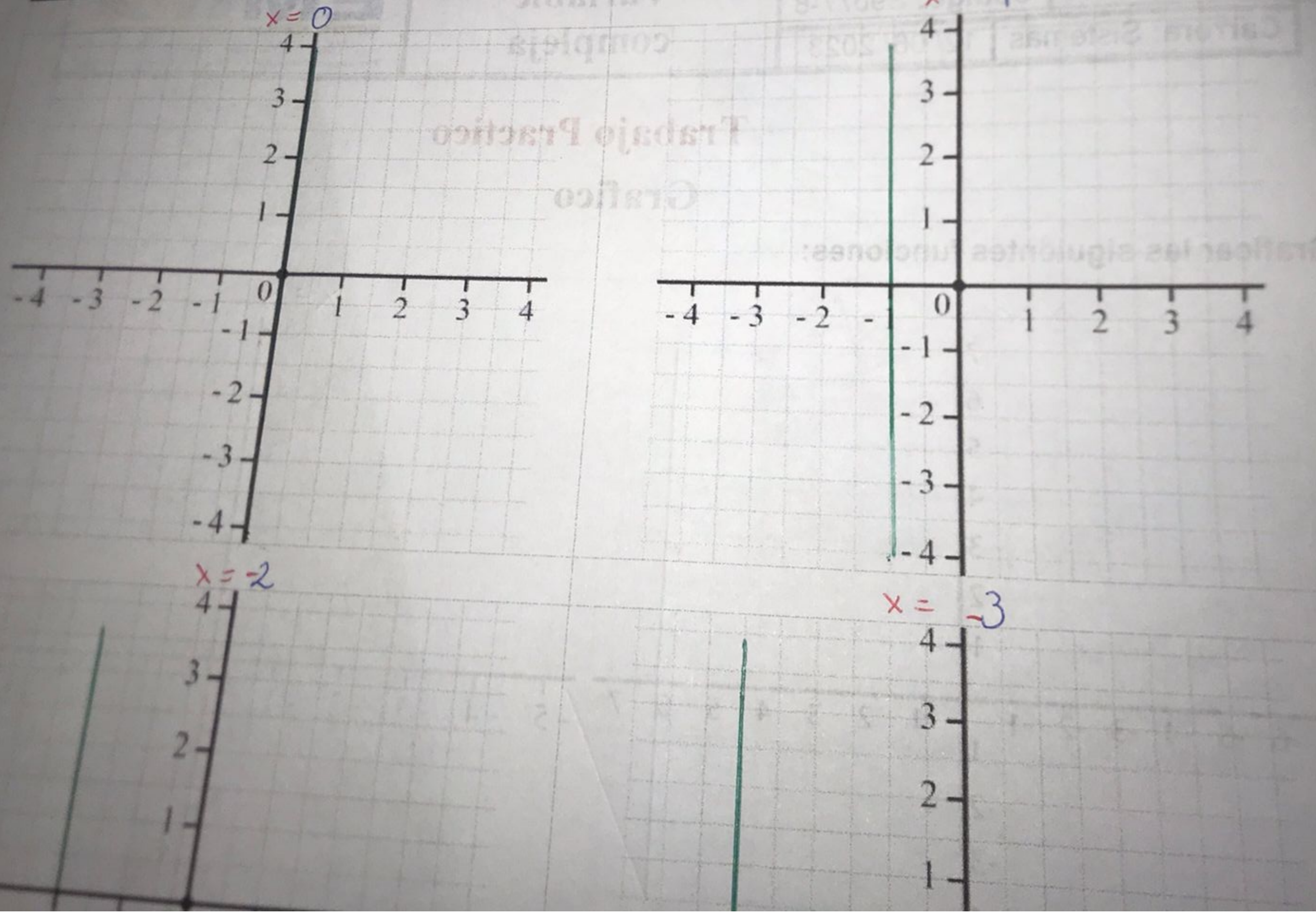
x = 4

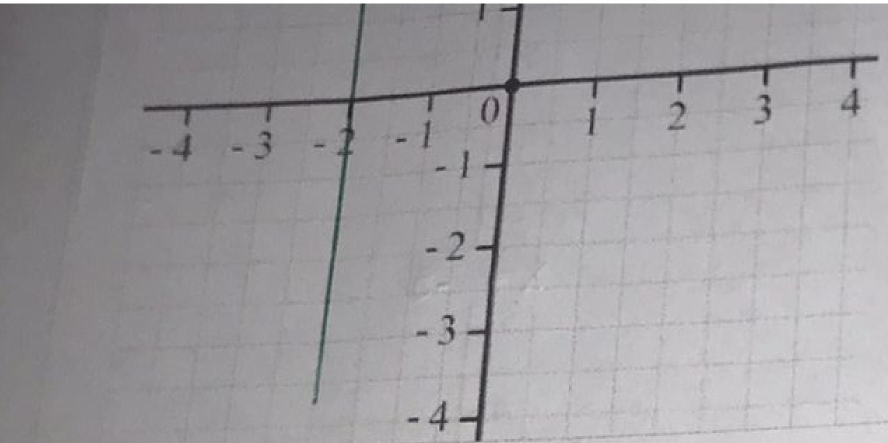


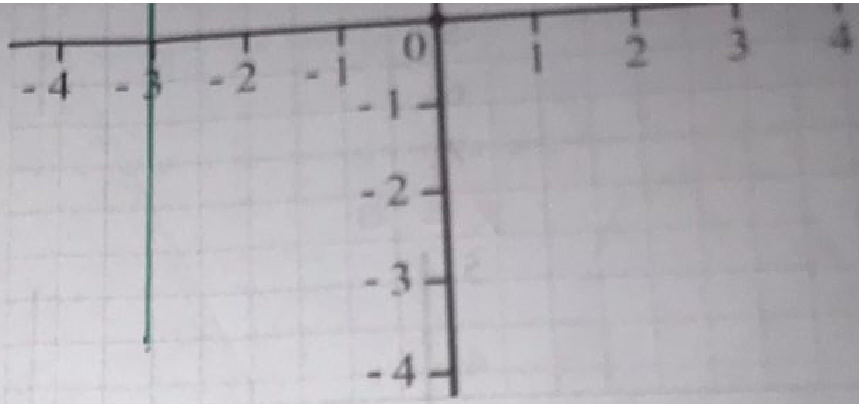
x = -5



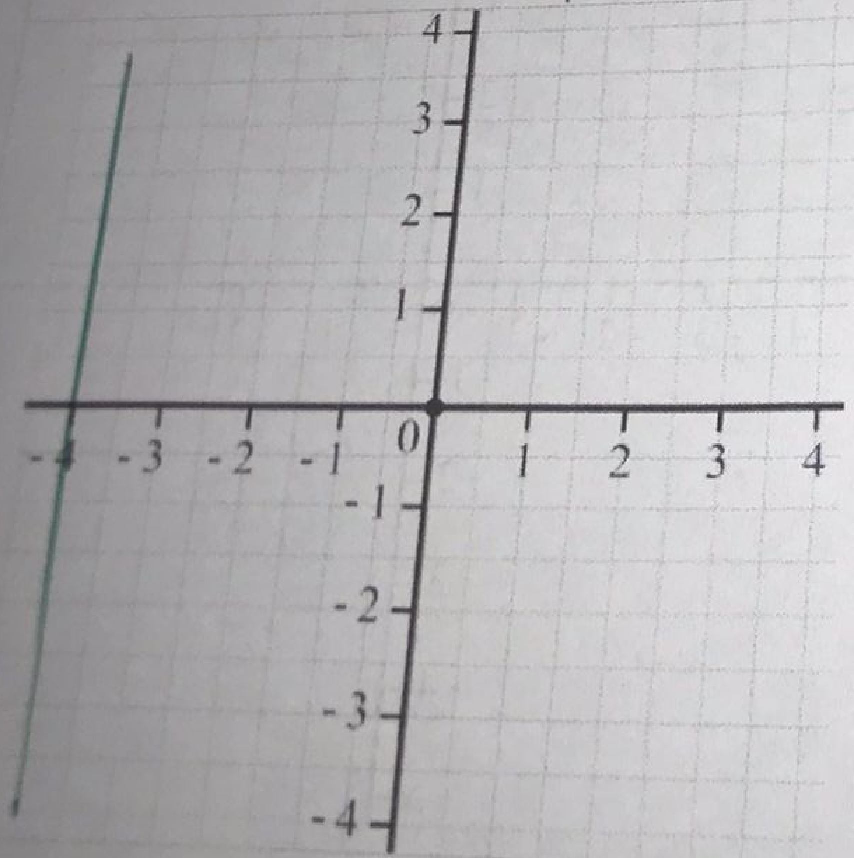
Nombre: Sofía Guadalupe Alejo Gracia	Código: S9077-8	Semestre III



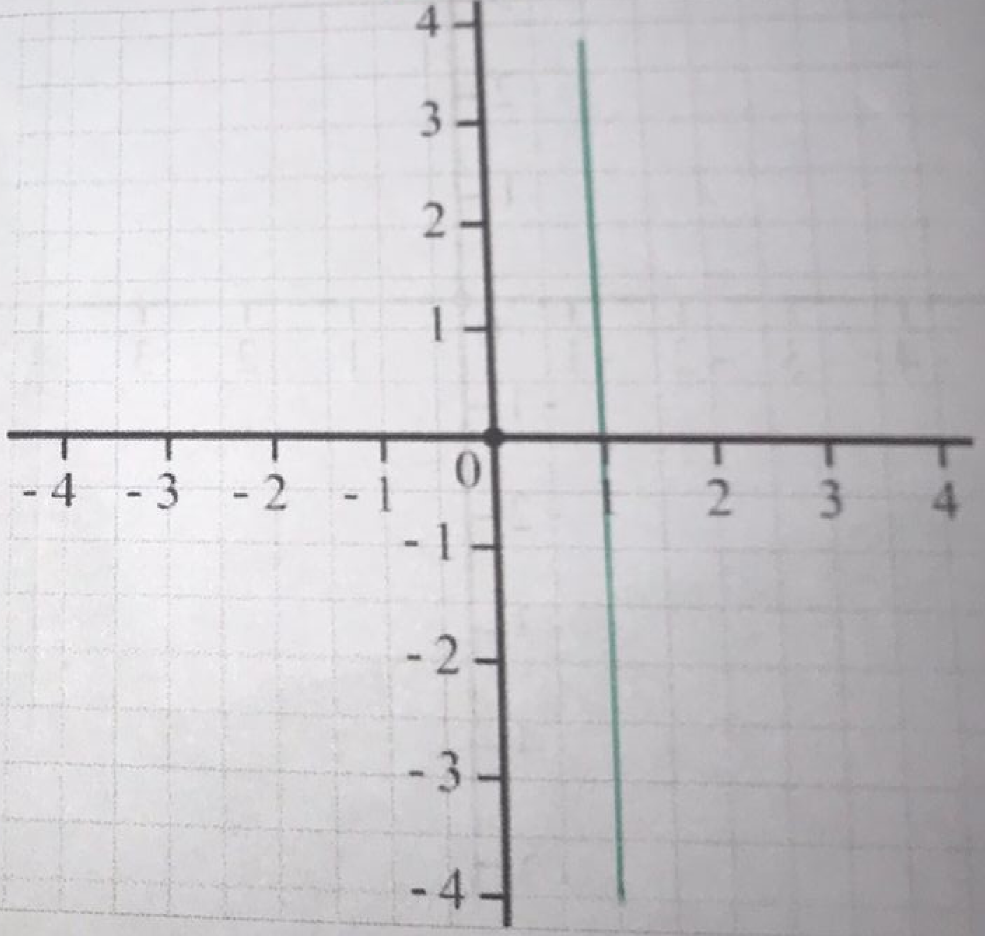

-4 -3 -2 -1 0 1 2 3 4
-1 -2 -3 -4


-4 -3 -2 -1 0 1 2 3 4
-1 -2 -3 -4

x = -4


4 3 2 1
-4 -3 -2 -1 0 1 2 3 4
-1 -2 -3 -4

x = 1


4 3 2 1
-4 -3 -2 -1 0 1 2 3 4
-1 -2 -3 -4

Sofia Guadalupe Alejo Garcia

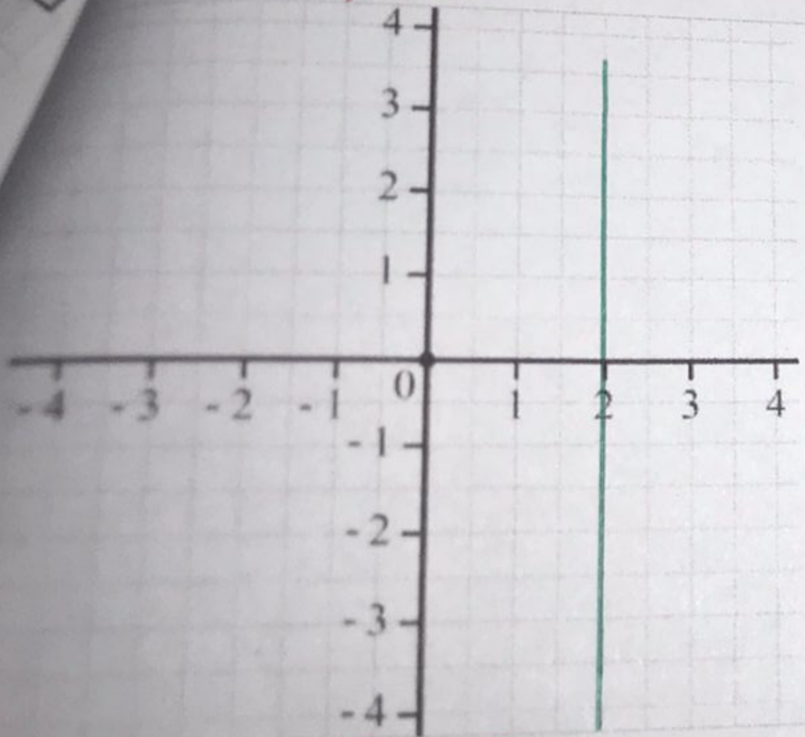
Semestre: 3er | **Código:** S9077-8

Carrera: Sistemas | 30/04/

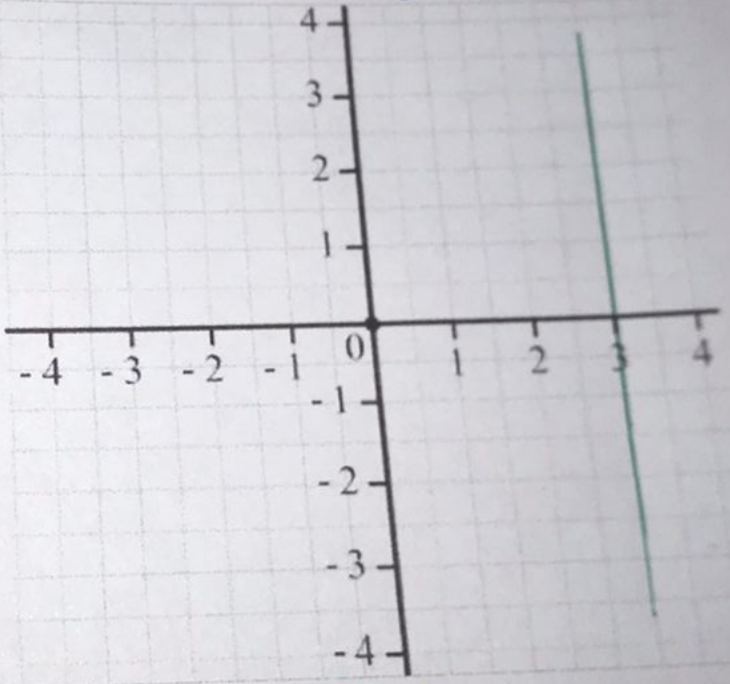
Estadístic

...re: Sofia Guadalupe Alejo Gracia | **Código:** S9077-8 | Semestre III

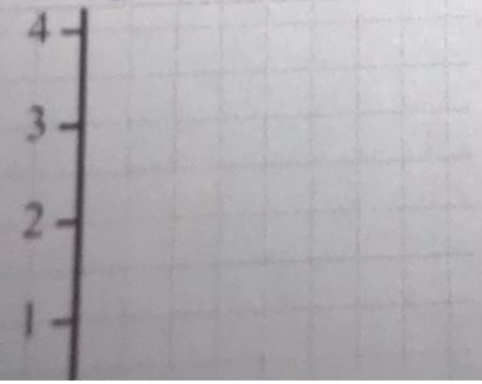
$x = 2$



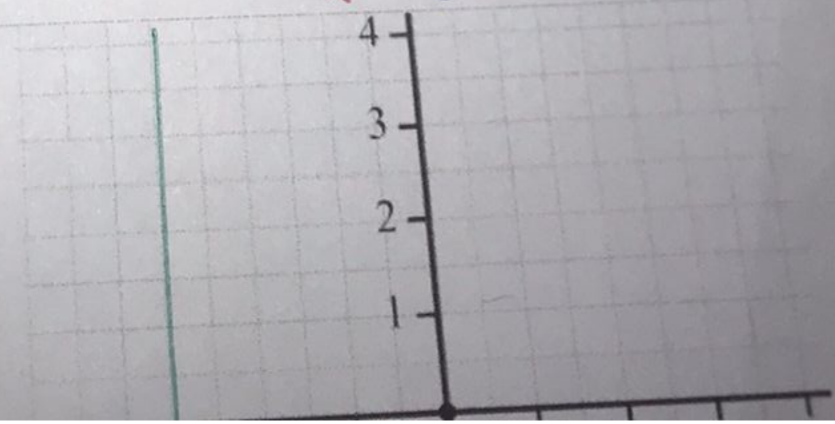
$x = 3$

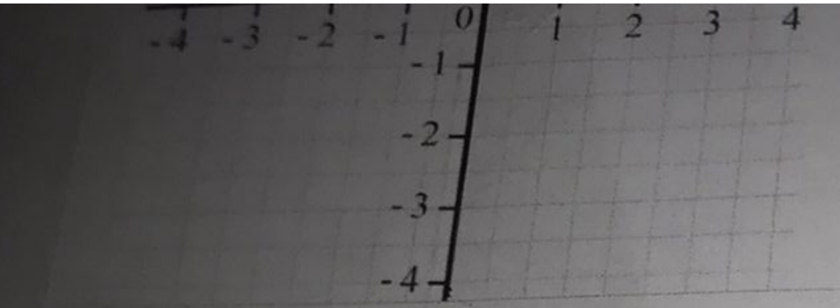


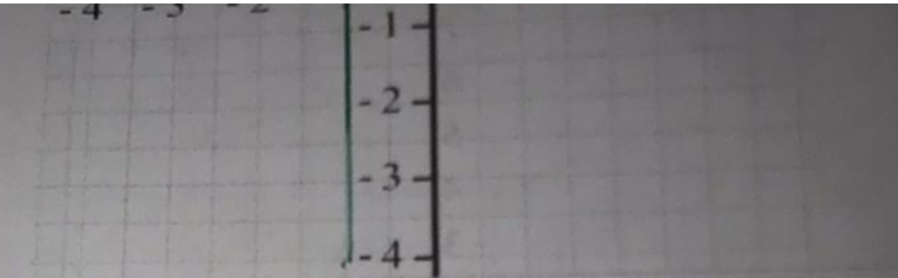
$y = [-5, 5]$



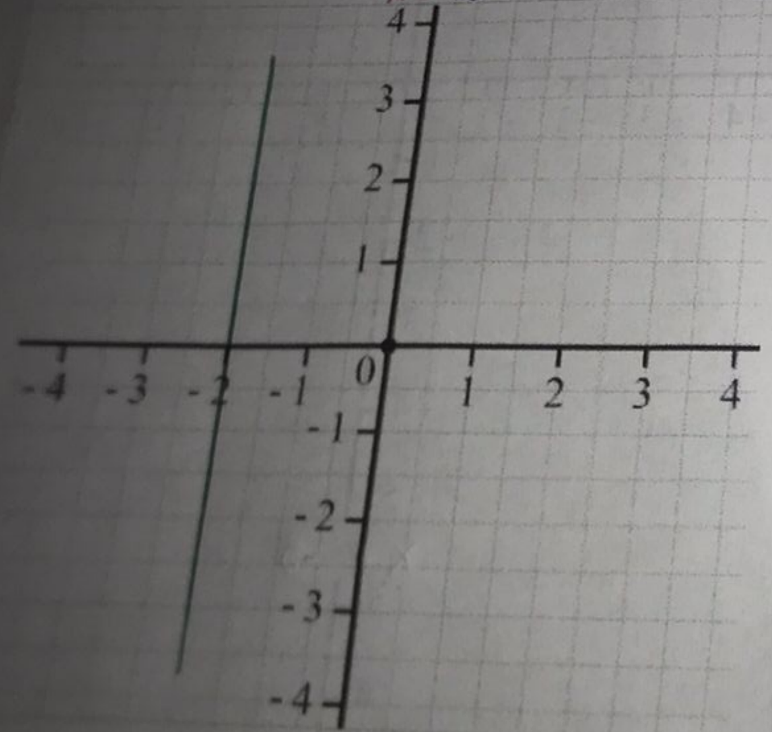
$X = -3$



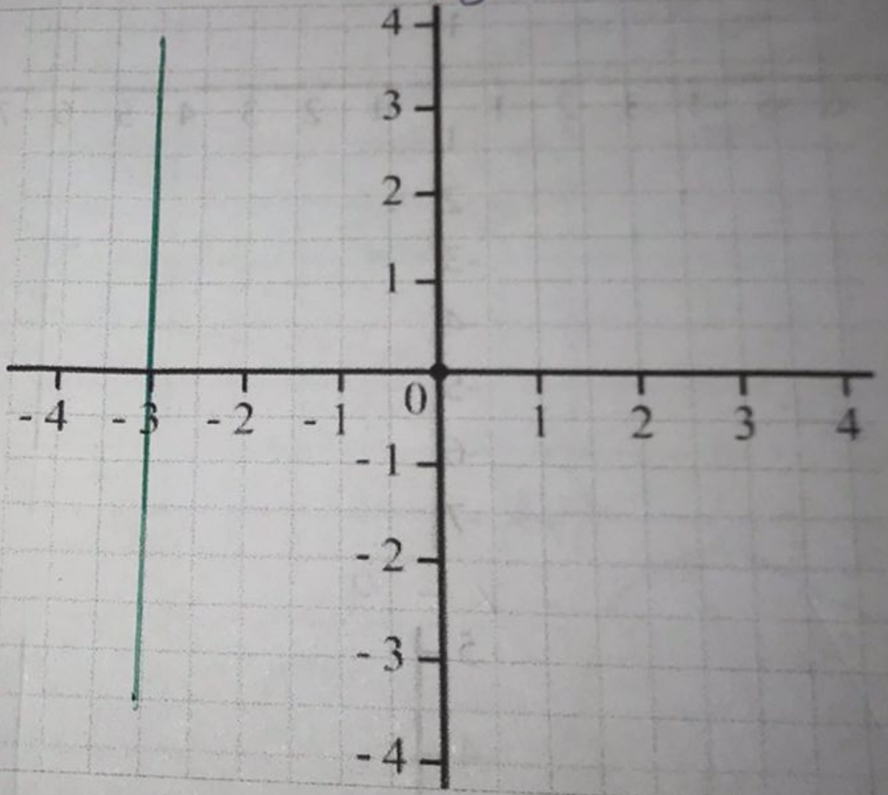




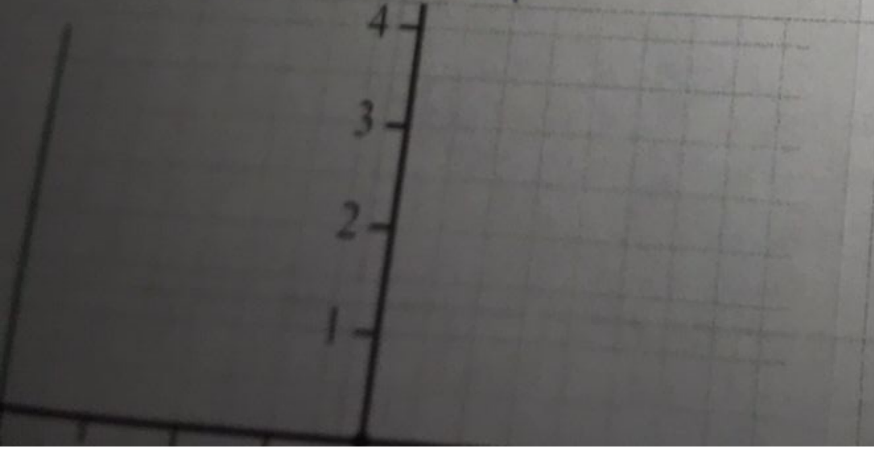
x = -2



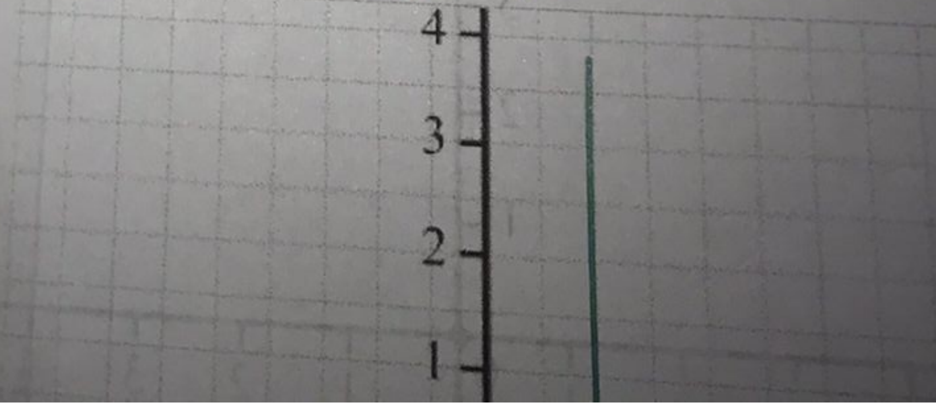
x = -3



x = -4



x = 1



a(- $y_1 = -3x+3$

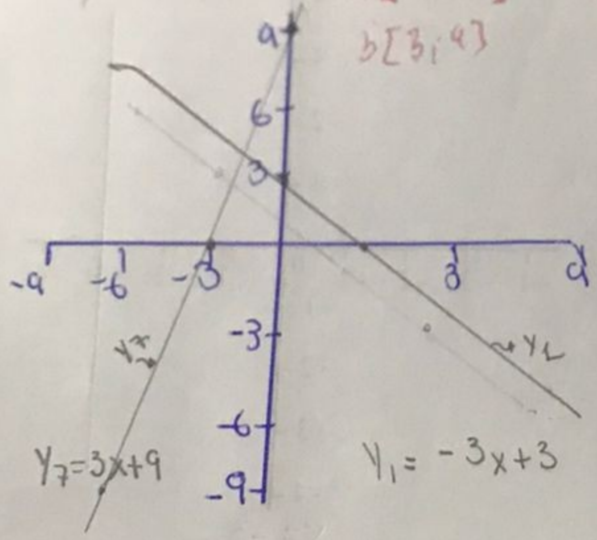
$y_2 = 2x+4$

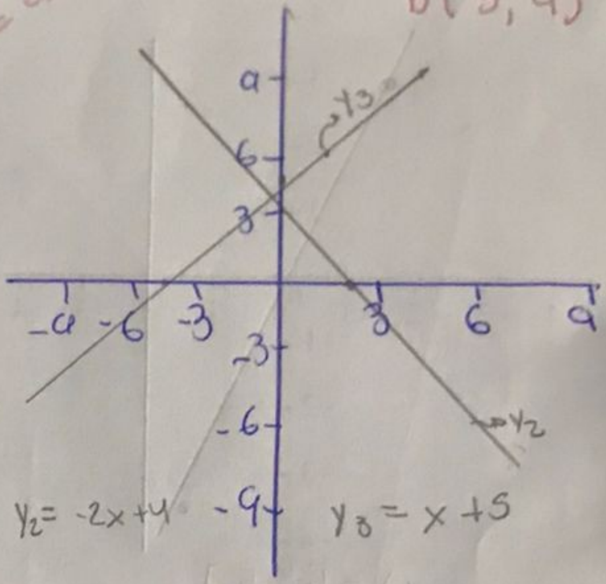
$y_3 = -1x+5$

$y_4 = 0x+$

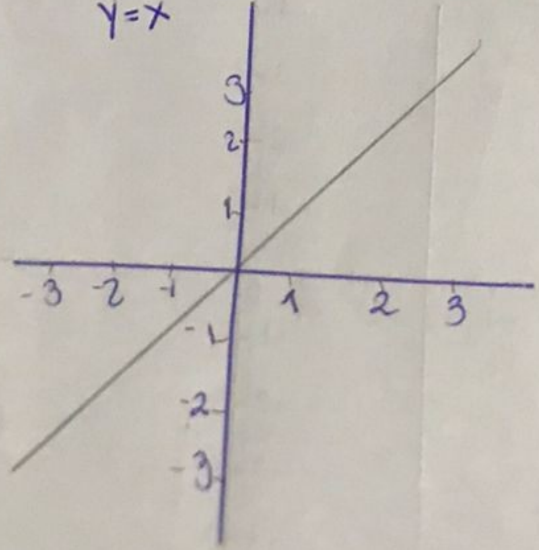
$y = a.x + b$ a[-3, 3] b[3, 4]

b(3, 9)

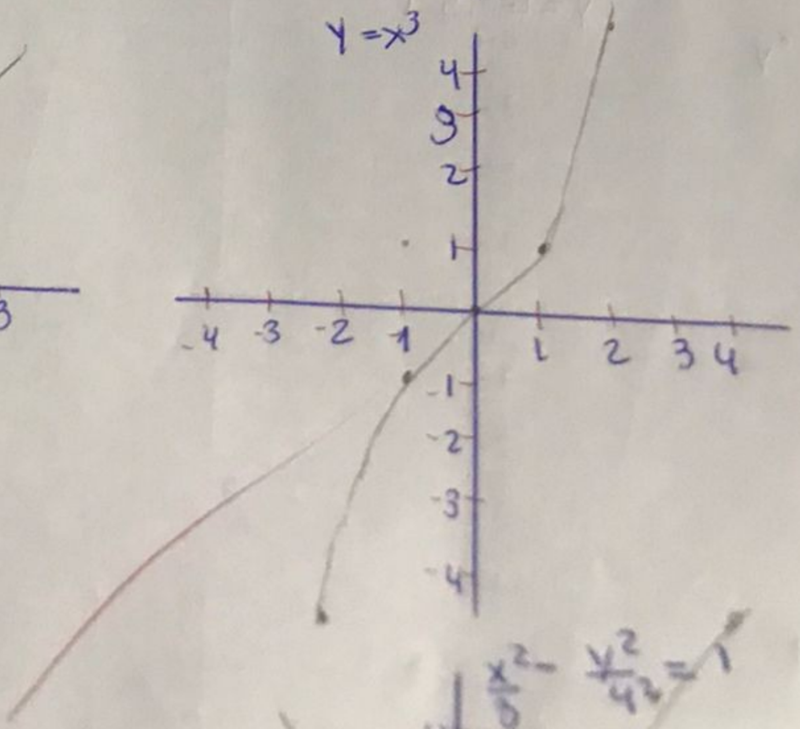




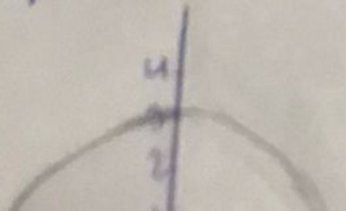
$y = x$



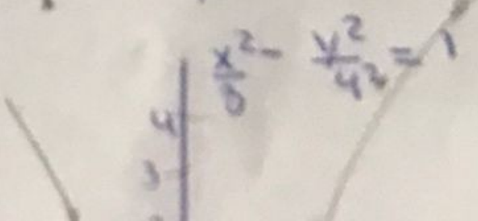
$y = x^3$

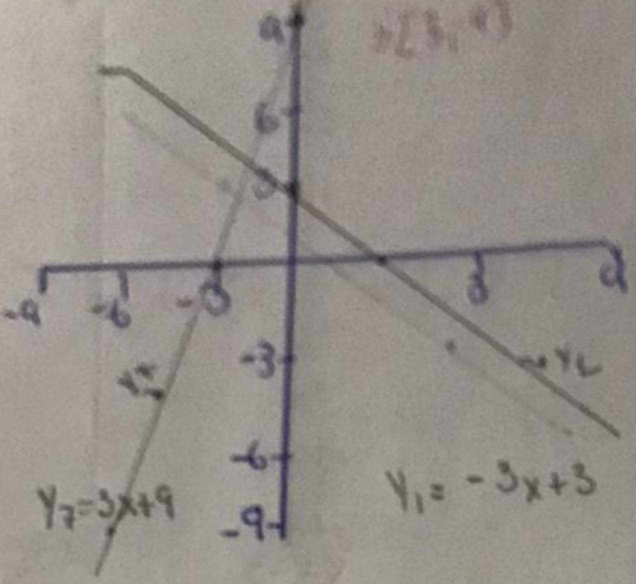


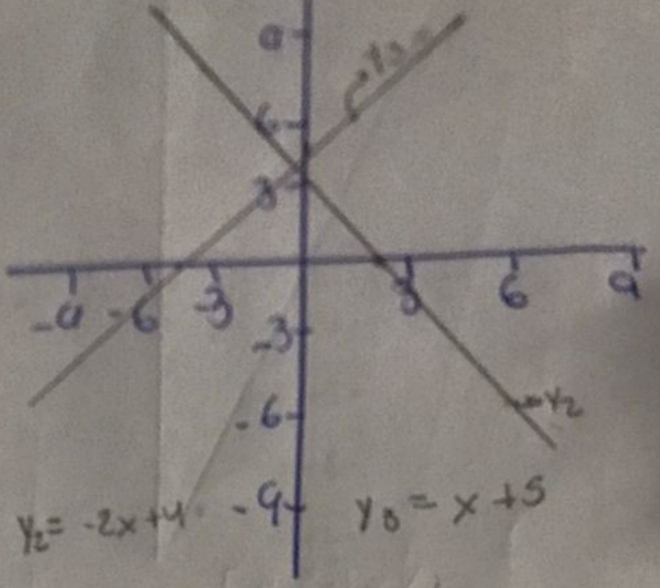
$x^2 + y^2 = 3^2$



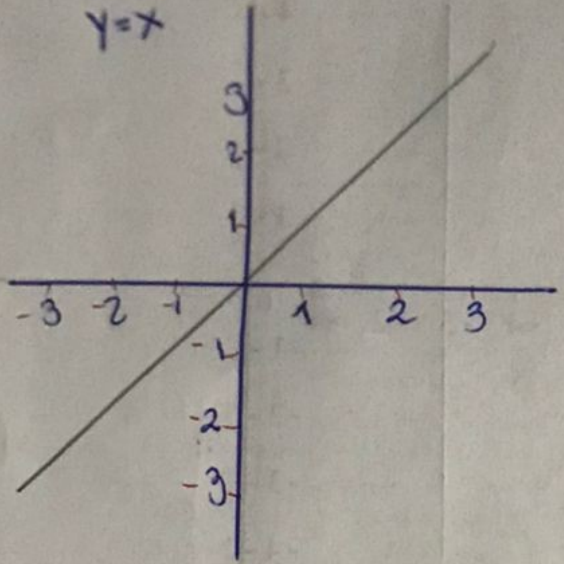
$\frac{x^2}{3} - \frac{y^2}{4^2} = 1$



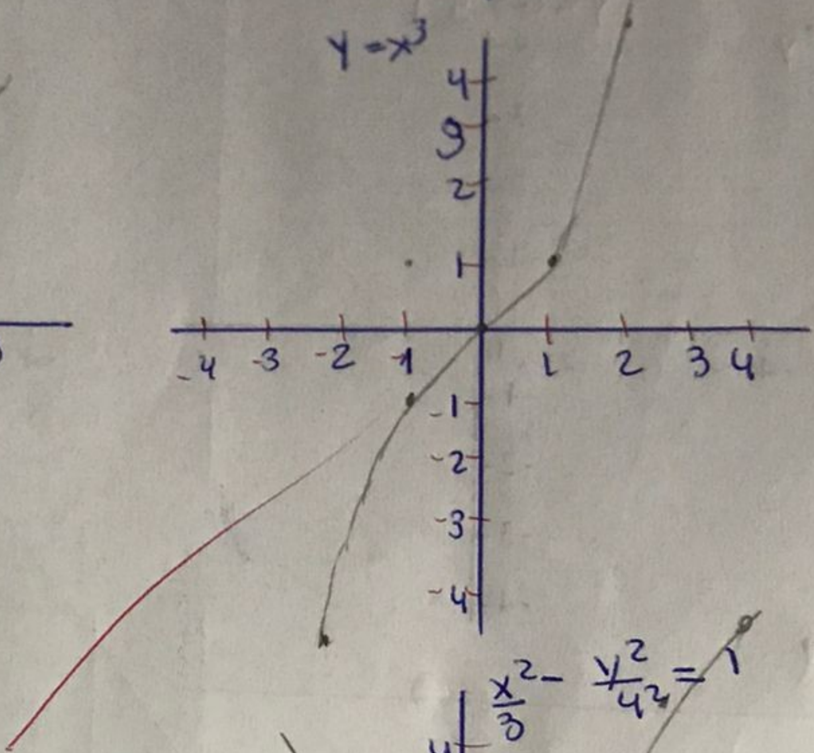




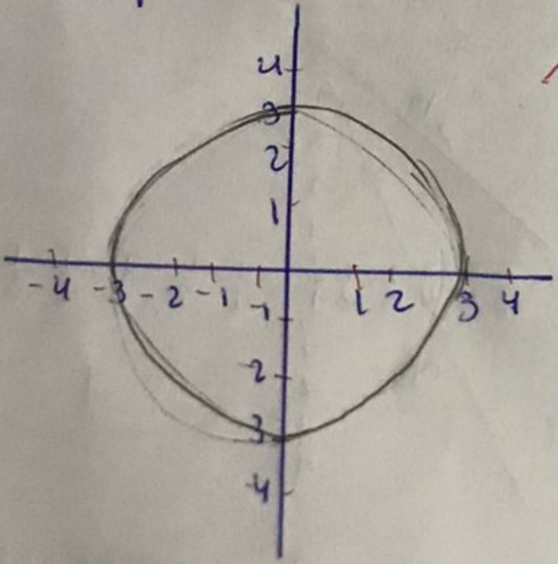
$y = x$



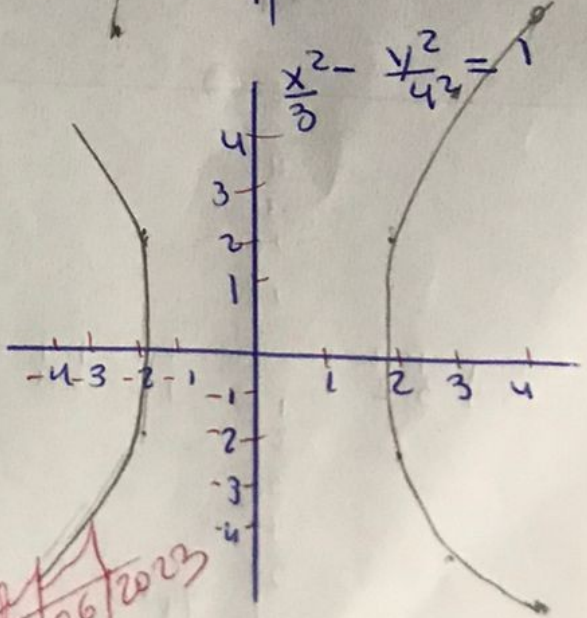
$y = x^3$



$x^2 + y^2 = 3^2$



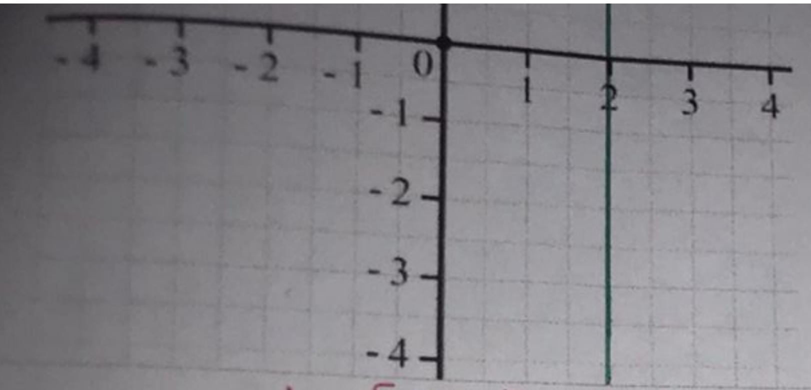
$\frac{x^2}{3} - \frac{y^2}{4^2} = 1$

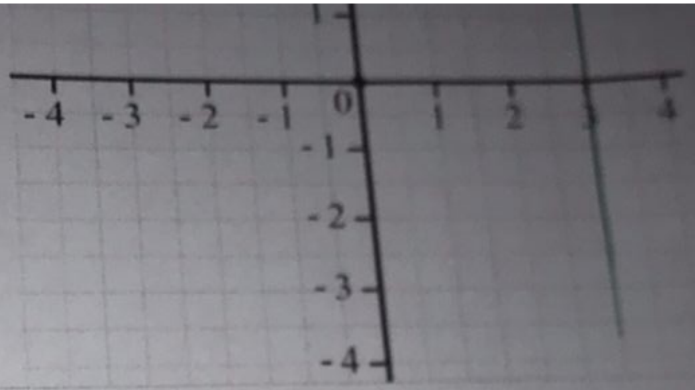


12/06/2023

$(4x)^2 - 3y^2 = 48$

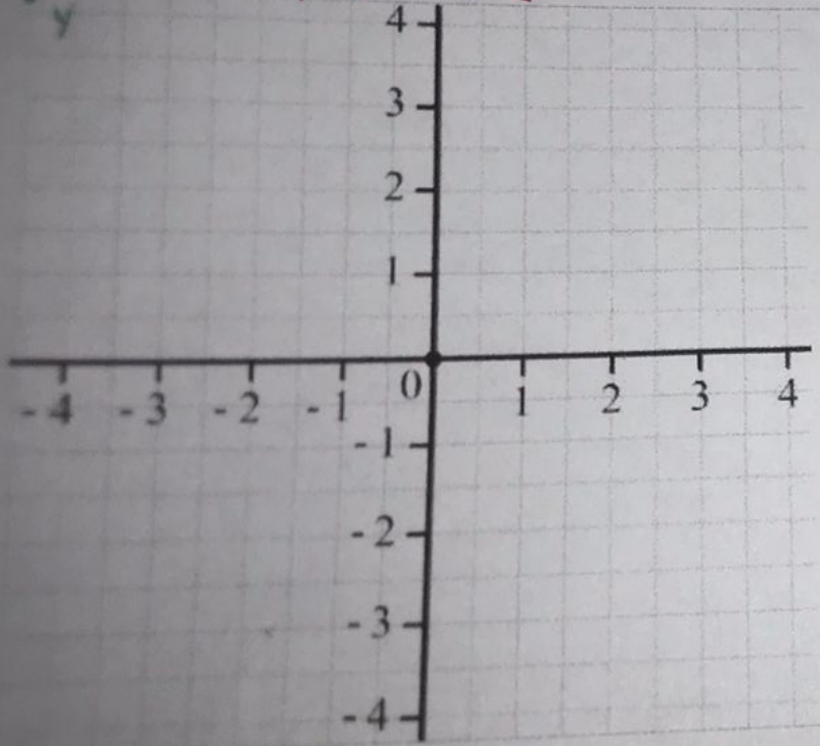
$\sqrt{\frac{4x^2 - 48}{3}} = y$

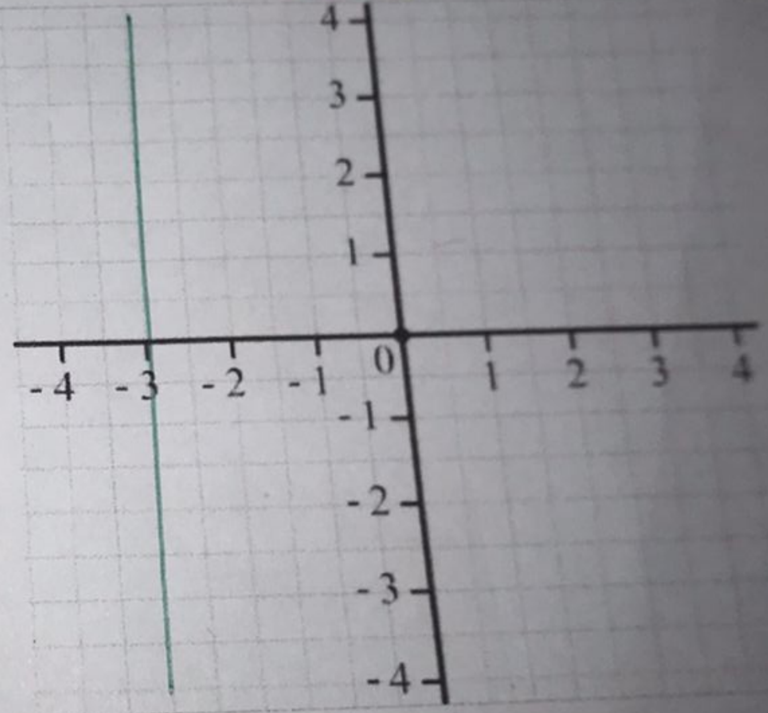


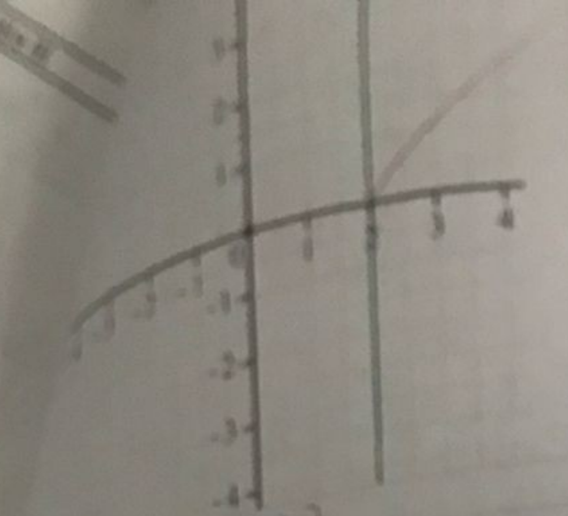


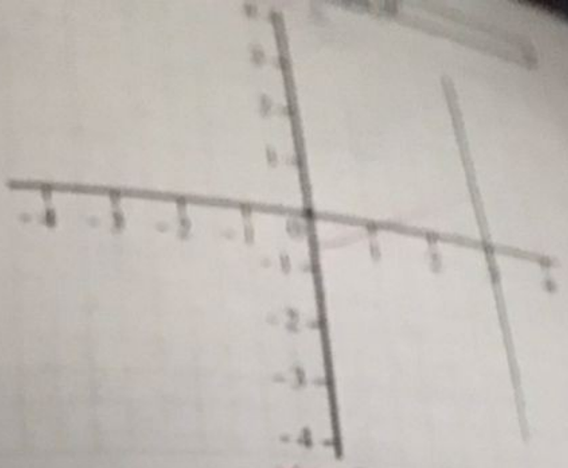
Y = [-5, 5]

X = -3

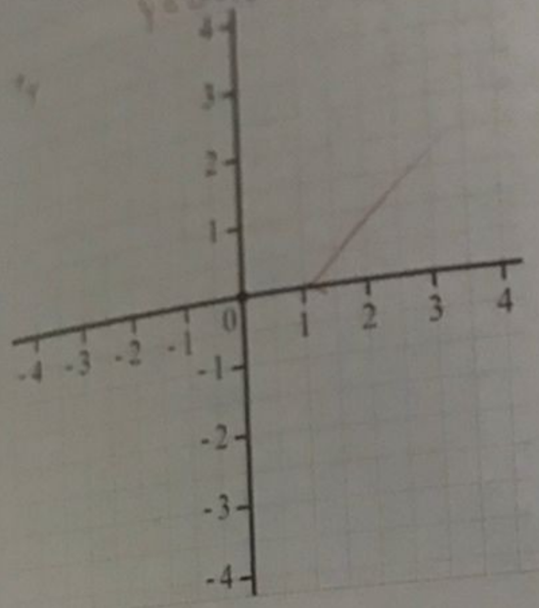




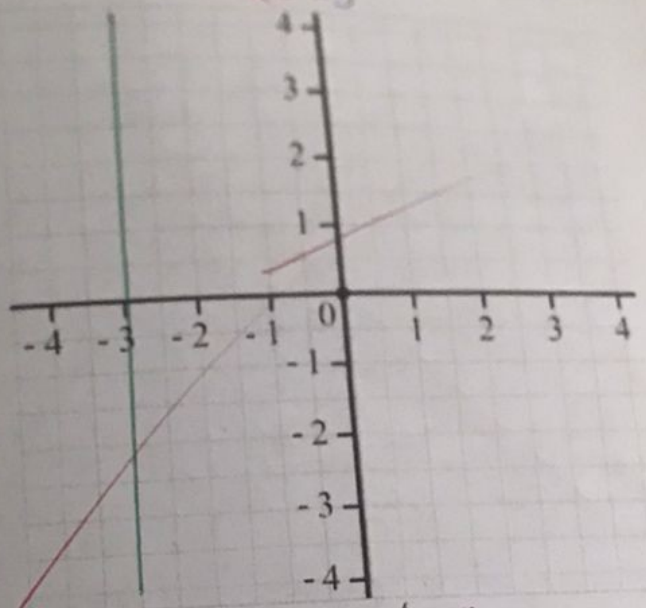


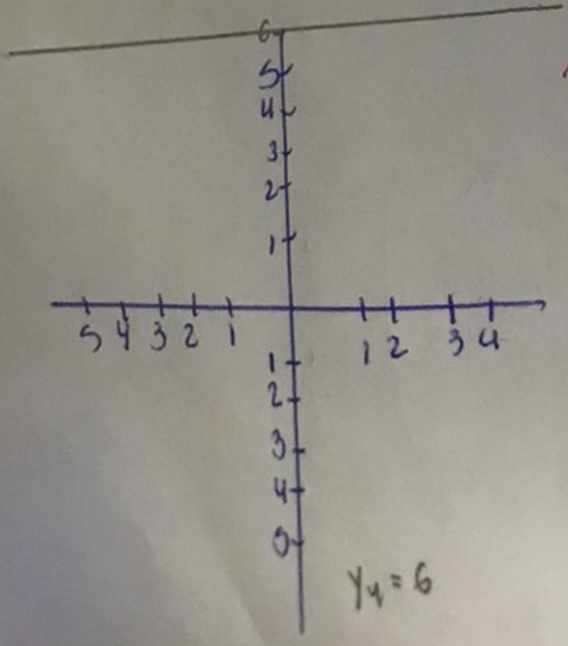


y = [-5, 5]

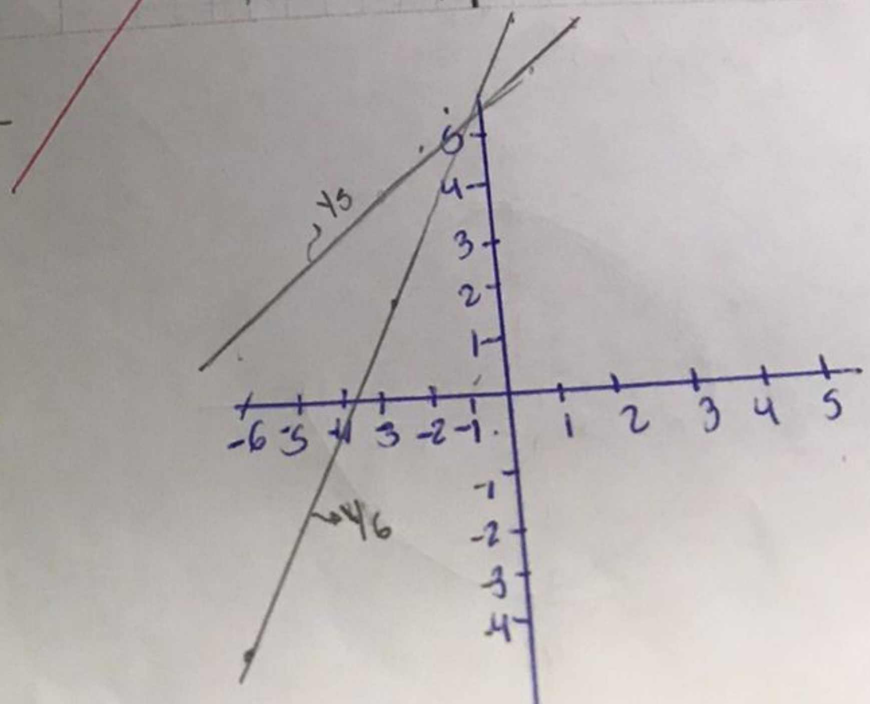


x = -3





$Y_4 = 6$



$Y_5 = x + 7$

$Y_6 = 2x + 8$